Government of Saskatchewan

Annual Report 2001

Saskatchewan Corrections and Public Safety

Office of the Fire Commissioner

Letter of Transmittal

The Honourable Andrew Thomson
Minister of Corrections and Public Safety

Sir:

I am pleased to present the Saskatchewan Fire Commissioner's annual report for the year 2001. In addition to the recorded provincial fire losses, this report outlines the branch's activities last year and identifies future directions.

Last year, six deaths and seventy-two injuries resulted from fire. This is outstanding considering Saskatchewan's ten-year annual average for fire deaths is twenty. This is also considerably better than the national average of 1.8 deaths per hundred thousand population. Much of this success can be attributed to greater acceptance of municipalities for the delivery of programs at the local level with greater emphasis on public education and fire prevention.

However, in 2001, there were several large loss fires resulting in the highest dollar loss ever recorded for Saskatchewan. Approximately $57 million dollars in direct property loss was recorded. This is up more than $2 million from 2000 and considerably greater than the five-year annual average of $49 million. It is important to note that the indirect costs associated with fire losses is roughly nine times that of the direct losses. This brings Saskatchewan's loss to more than $500 million for the year.

The Saskatchewan fire service is recognized for its increased efforts in public education and fire prevention. It is this focus which supports the downward trend in fire-related fatalities.

Respectfully submitted

Rick McCullough
Fire Commissioner

INTRODUCTION

The Office of the Fire Commissioner (OFC), in accordance with *The Fire Prevention Act, 1992* and Saskatchewan Fire Code Regulations, provides Saskatchewan communities, fire departments, and emergency service organizations with information, education and leadership programs and services to protect people, property and the environment from fire losses.

As prescribed by *The Fire Prevention Act*, this is accomplished through the:

- promotion and encouragement of fire prevention and the protection of life and property against fire;
- collection and dissemination of information respecting fires in Saskatchewan;
- keeping of records for all fires occurring in Saskatchewan, including the cause, origin, and circumstances of each fire and other information respecting each fire that the Fire Commissioner considers appropriate;
- investigation of fires or by causing fires to be investigated and by holding inquiries into any fire when the Fire Commissioner considers it necessary to do so in order to ascertain the cause, origin and circumstances of the fire;
- administration and enforcement of the Act and regulations within park land constituted pursuant to *The Parks Act* or a regional park established pursuant to *The Regional Parks Act, 1979;*
- provision of training courses in fire fighting and prevention; and
- performance of any other duties that the Minister may direct.

The OFC consists of 14 highly qualified individuals who form an outstanding team focused on minimizing Saskatchewan's fire losses. In addition to the Fire Commissioner, there are two Fire Prevention Officer Supervisors; eight Fire Prevention Officers; one Statistician; and two administrative support staff. The head office of the OFC is located in Regina with a branch office in Saskatoon.

Saskatchewan Fire Losses

Each year approximately 5,000 fires result in an average of 20 deaths, 74 injuries and 43 million dollars in direct losses. The downward trend in deaths and injuries over the last 30 years is very encouraging however, the number of fires and the associated dollar loss continues to climb.

In 2001, Saskatchewan recorded 6 fire-related deaths or .6 per 100,000 people. This number is better than our ten-year average of 20 per year and is much better than the national average, which currently reflects 1.8 fire-related deaths per 100,000 population. There was also a significant increase in dollar loss last year surpassing the 2000 total by more than 2 million dollars reaching a total of $57 million. This is also considerably greater than the 10-year average of $43 million.

The largest number of fire related fatalities continue to occur in residential occupancies where more than 82% of all deaths are recorded. The major cause of death is attributed to the misuse of smoking materials, which is consistent with most other jurisdictions in North America. As well, the number one cause of fires in the home is still related to cooking. Each of these causes is preventable calling for greater prevention and public education efforts to reduce their frequency.

To address these losses, the OFC focuses its resources on fire prevention, fire investigation, municipal advisory and program support services and the testing and certification of training for members of the fire service.

Fire Prevention

It is recognized that education of the public in the prevention of fires is the single activity with the greatest potential for reducing senseless fire losses.

The delivery of public fire and life safety education programs is one way of changing behavior and ensuring that proper messages are delivered or instilled in children at an early age. The OFC supports the implementation of The Learn Not To Burn® program and Risk Watch™ in schools and through partnerships with communities. These programs have proved successful in reducing fire losses by increasing fire and life safety awareness in the minds of young children. Not only does this contribute to the development of proper behaviour at an early age it also serves to get the fire safety message into homes for other members of their families.

The OFC has a goal of ensuring a public education contact in every community so that a variety of public education programs are available and ongoing. Currently, more than 250 communities have identified a public education person who can assist with the delivery and promotion of fire safety education programs at the local level.

In 2001 the OFC held its third public fire and life safety education conference at the Echo Valley Conference Centre. This conference provides participants with valuable knowledge and information while providing the motivation necessary to strengthen public fire education programs in their own communities. The OFC is committed to promoting fire prevention programs through this approach.

Fire safety through code enforcement contributes to the prevention and reduction of fire losses. Although "owners" are required to comply with the National Fire Code, municipalities are given powers to ensure requirements are met. The OFC staff works closely with local fire chiefs and municipal officials in carrying out routine fire prevention and safety inspections. Staff also respond to specific or formal complaints lodged by members of the public or others who feel fire safety measures are inadequate in a particular situation.

On a broader basis, the OFC regularly delivers general lectures and presentations to a variety of audiences on fire safety issues. It also has a full range of brochures, pamphlets and fire safety videos, which are available to assist in the delivery of local fire prevention campaigns and to members of the public.

In 2001 the OFC supported the National Fire Prevention Week campaign which promoted fire safety in the home. The theme was "Cover the Bases & Strike Out Fire". The focus was on electrical and cooking safety as well as maintenance of smoke alarms and exit drills in the home. The campaign was a success building on the messages established by previous campaigns.

Fire Investigation

Each year, significant OFC program resources are dedicated to the investigation of fires in order to determine the origin, cause and circumstances surrounding the fire. As a matter of priority, the OFC investigates those fires involving deaths, injuries, where suspicious circumstances are reported and where the fire involves a provincially owned, leased or occupied property. Staff also assist the local fire chief with fire investigations upon request.

In 2001, the OFC staff was directly involved in investigations of more than 5% of all the fires that were reported. Many of these investigations were in conjunction with other agencies including insurance companies, police departments and others with a vested interest in determining the cause of fires and finding ways to eliminate them.

Advisory and Support Services

The primary focus of advisory and support services is to assist fire departments and municipalities in delivering effective and efficient fire prevention and protection programs for their community.

The OFC staff provide detailed information on available prevention and protection programs through direct contact as well as tools posted on the website. These tools include a Local Assistants' Handbook that contains a range of reference material to assist with establishment and delivery of protection services. It addresses the basic administration and organization needs of a fire department, suggests public education prevention activities, and assist with risk assessment, risk management, and emergency planning. It also covers fire inspections related to code enforcement, interpretation of *The Fire Prevention Act* and its regulations and outlines steps for fire investigation and reporting of fire losses as well as other valuable related information.

In 2001, the OFC continued delivery of a series of informational seminars designed to provide municipal authorities an overview of the roles and responsibilities of those individuals and agencies who deliver fire prevention, protection, suppression and public education services to their community.

Fire Service Testing and Certification

To support fire service training, a network of adjunct fire service instructors has been established to meet the demand for ongoing training needs. The OFC focuses its resources in the certification of fire service members through both a provincial and internationally recognized evaluation system. Both the International Fire Service Accreditation Congress (IFSAC) and the National Professional Qualifications Board (NPQS) have accredited the OFC to certify emergency responders. This allows for the issuing of certificates in a number of program areas that are consistent with internationally recognized professional qualification standards. The OFC provides an Evaluation and Certification Guide for all fire department members which describes the Saskatchewan fire service certification system.

In 2001, the OFC provided certification in a number of areas of interest. One person was certified under NFPA Standard 1035, *Public Fire and Life Safety Educator;* 4 persons under NFPA Standard 1001, *Professional Qualifications for Fire Fighters*; 23 persons under NFPA Standard 1041, *Fire Service Instructor*; two persons under the NFPA Standard 1033, *Fire Investigator;* and 96 persons under NFPA 472, *Awareness and Operations.* The demand for certification for the fire service continues to grow as more people recognize the merits of formal recognition for their accomplishments and the requirement to meet recognized standards increase.

In 2001 the OFC continued to certify members of the Emergency Services Training Institute (ESTI) located in Martensville. The graduates of this fire fighter pre-employment program have met the necessary National Fire Protection Association (NFPA) fire fighter professional qualification standards.

Program Support

The program support area provides a variety of services to fire chiefs, municipalities, government departments, fire departments, members of the public and other agencies and parties interested in reducing fire losses.

The OFC maintains and analyzes records of all fire losses. Ongoing statistical analysis is conducted and information maintained regarding the number of fires, deaths, injuries and cause and circumstances surrounding each fire. The information gathered from fire reports assists in the development of a variety of programs related to fire safety. These include such things as fire safe products such as flame resistant children's pyjamas, child resistant lighters, flame resistant tent materials, and flame resistant carpeting. This information also supports the development of new fire safety legislation and regulations for building and fire code changes, training programs for fire fighters and fire prevention education programs for the public. Each of these areas ultimately contributes to the reduction of fire losses.

Furthermore, the fire loss information is widely distributed being used nationally, provincially and locally to help identify ways to limit fire losses. This information also serves to support inquiries from provincial and federal government departments, fire departments, news media, insurance personnel, police and other interested parties.

The OFC's electronic data warehousing and analysis system for fire loss statistics was further upgraded in 2001. A number of correlative programs were implemented to encourage reporting and to gain timely and accurate fire incident reports from fire departments, insurance companies and local assistants. Some fire departments are now reporting fires directly to the OFC electronically. These programs are monitored by the OFC to improve the fire loss statistical gathering and analysis system for the province.

To support the training and education of emergency personnel the OFC ensures that student certification records are maintained for all fire fighters tested by the OFC.

The OFC maintains a lending library of training modules and emergency videos on fire prevention and education for all ages and interest groups. Video packages are loaned to a variety of government departments, fire departments and other agencies on a regular basis. As well, complete technical reference libraries are updated and maintained for use by members of the public, architects, engineers, designers, contractors and staff.

The Fire Commissioner's newsletter, published four times a year, focuses on the delivery of messages related to specific fire hazards associated with each season and associated winter, spring, summer and fall activities. The newsletter identifies topics of current interest to the fire service and serves to announce upcoming seminars, workshops and conferences as well as delivering fire safety messages. It also serves as a tool for various fire service associations to reach their members with information regarding their activities.

The expansion of Sask911 continued with service available to most citizens of the province which is having a positive influence on the Emergency Services Telecommunications Program. Last year $325,000 was spent on new telecommunication equipment purchases and upgrades for fire departments.

Partnerships

The OFC relies on partnerships to assist with the delivery of effective province-wide fire protection and prevention programs. These cooperative efforts help get the public, local organizations and other stakeholders more involved in fire prevention and safety efforts. Such partnerships are critical to the future delivery of OFC services and programs. Strengthening existing partnerships and while building new ones provides opportunities to lower costs, reach new clients, sustain existing programs and improve services.

The OFC provides ongoing support to the various associations including the Saskatchewan Association of Fire Chiefs, the Saskatchewan Volunteer Fire Fighters' Association and the Saskatchewan Chapter of the International Association of Arson Investigators. This is accomplished through involvement in regional and annual meetings, by providing materials and staff to assist the associations in training program delivery and by providing technical services and support as required.

Additionally, the OFC maintains its working relationship with the Royal Canadian Mounted Police, local police services and insurance companies by providing training and technical assistance in the investigation of fires.

Future Directions

The recent role and responsibility review has served to clarify the mandate and identify the key roles for the OFC. Most importantly, it was recognized that the need to set the overall legislative and regulatory framework for fire services rests with the OFC. As well, the Fire Service Joint Council (FSJC) was established to provide advice and guidance to Government on issues relevant to the fire service.

The OFC will provide information on the needs and capacities of the various municipalities that will assist in developing the frameworks for greater inter-municipal organization. This will include discussions on regionalization that help to work out inter-municipal agreements and provide information and guidance through the FSJC in its efforts to develop a regionalized fire system with a strong volunteer support base.

Promoting greater regional cooperation and resource sharing will allow municipalities to deliver services that they otherwise could not afford to deliver. Supporting efforts to develop and organize a volunteer structure within each municipality and/or region will do this. Such efforts are needed in order to secure a large and broad enough volunteer base to develop community support in the delivery of fire prevention and education programs.

The OFC will continue to focus on developing inventories of fire protection equipment and collecting information on response capabilities so that the OFC can provide accurate and up-to-date information to municipalities and potential regions on local needs and capacities.

The OFC is also obliged to develop, publicize and support the basic standards for the delivery of fire services in the province. This includes response training, departmental operational requirements and public educational prevention programs such as the Learn Not To Burn® program and Risk Watch™.

The OFC will continue to work with communities, businesses, emergency response agencies and associations throughout the province to ensure a high degree of cooperation exists for the common purpose of reducing fire losses. Areas of co-operation in fire prevention, public education and fire investigation are being expanded. The OFC will provide leadership and direction to local authorities placing greater emphasis in the areas of public education and training. Training local assistants to provide fire prevention and education programs within their own community will be further addressed in 2002.

It is anticipated that much of this improvement will be accomplished through the FSJC. The FSJC is in the best position to gain support for a system of greater regional cooperation since it comprises representatives from the three major fire service associations in the province and the OFC. The FSJC will serve to improve consultations and communications regarding the administration of legislation, regulations, codes and standards. This will strengthen relationships between the province and its fire service stakeholders.

Future emphasis of the OFC programs will be in the direction of building capacity at the local level. Support to local fire chiefs and municipal officials in the promotion of their own fire protection programs will be expanded. This approach is in support of the OFC's ongoing commitment to build a more locally autonomous fire service delivery structure by maintaining its policies of non-intervention in areas of municipal services and allowing issues to be resolved through existing non-provincial mechanisms.

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Table 1: Fire Losses by Fixed Property Use

	# Fires	Total $ Loss	# Injuries	# Deaths
Agricultural laboratory	1			
Agricultural products bulk storage No barns	14	5,925,824	1	
Agricultural products loose or bagged - for storage	1			
Agricultural supply storage	4			
Airport passenger terminal	1			
Amusement center Excludes bowling and billiard	2			
Amusement, Recreation Place Unclassified	5			
Animal barn, cattle, pigs, horses, dog kennels/other livestock	54	9,103,313		
Any Level of government office Excludes Post Office	3	24,300		
Apartment, Tenement, Flat - unclassified (describe)	5	900		
Apartment, Tenement, Flat- 3 to 20 unit with business	12	9,300		
Apartment, Tenement, Flat-1 or 2 unit with business	2	100		
Apartment, Tenement, Flat-1 or 2 unit without business	10	224,084	2	
Apartment, Tenement, Flat-20+ units	24	100		
Apartment, Tenement, Flat-3 to 20 unit - No business	84	697,873	6	2
Arena, stadium, amusement/entertainment tent	2	1,000,000		
Assemblies Miscellaneous - unclassified (describe)	1	500		
Automobile Includes cars and ambulance	436	1,733,420	1	
BBQ (outside)	5	250		
Ballroom, gymnasium, dance hall and community hall	3	126,191		
Bank	2			
Barber shop or hairdressing establishment	1	201,000		
Barn storage Excludes silo, and animal barn	14	122,736		
Basic iron and steel manufacture	1			
Basic metal products manufacture See manual-exceptions	1	4,000		
Basic nonferrous metals manufacture	1	2,400,000		
Beauty parlour	1	2,000		
Bowling alley	1			
Bridge, overpass, trestle	2	1,000,000		
Brush and grass on open land, field Excludes forests	801	712,917	7	
Builders' supply sales	1			
Buildings under construction	2			
Buildings under demolition	2	7,500		
Bus, trackless trolley	4	3,000	1	
Business and Personal Services Facility Miscellaneous	8	250		
Camper on or off truck	1	1,500		
Camping trailer (Tent trailer)	1	8,555		
Car wash facility	1	89,336		
Cement, batch mixing plant	1			
Child Care - unclassified	1			
Child Care hospital, for children only	1	7,500		
Children's day center, open more than 4 hours a day	1	50,000		
Children's playhouse	1			
Church, chapel	2	360,000		
Clothing store, sale of wearing apparel	2	222,000		
Club in physical recreation complex	1			
Club, Social, Sport - unclassified (describe)	1	1,000		
Coal, coke, briquette and charcoal	1			
College, university	3			
Construction equipment - Excludes crane, grader	8	161,285		

	# Fires	Total $ Loss	# Injuries	# Deaths
Construction, other than buildings	1			
Contractor's sheds (office or utility trailer)	3	33,500		
Corral	3	8,500	1	
Court room	1	5,000		
Cow/cattle/pig production Excludes milk processing	1			
Crops, orchards, straw stacks and hay stacks or bales	111	408,884	1	
Distilling, rectifying, blending spirits	1			
Drilling rig (petroleum and gas only), seismic	1	5,000		
Drug store, with pharmacist on duty	2			
Dumps Excludes enclosures to burn	9	500		
Dwelling, farm (1-family)	26	1,433,428		
Dwelling, one- and two-family - unclassified	27	104,267		
Dwelling, seasonal use - in season (1-family)	12	194,480		
Dwelling, seasonal use - off season (1-family)	2	19,000		
Dwelling, year-round use (1-family)	594	12,196,612	35	4
Dwelling, year-round use (2-family)	17	10,050		
Education Facility - unclassified (describe)	5			
Electric light and power distribution system	9	800		
Electric light and power generating plant	1			
Elementary school Includes combined kindergarten	7	9,950		
Farm Facility-unclassified(fish hatchery, water trough, cat breeder)	15	48,828		
Farm tractor and equipment, grain dryer, harvester, etc.	251	3,814,340		
Fences, poles, railroad ties	41	33,452		
Flammable Liquids/Gases/Petroleum Products-unclassified	1			
Flammable liquid, chemical tank truck	2	2,000		
Flammable liquids tank storage. No refinery tankage	3			
Florist shop, greenhouse	2	19,000		
Food Processing-unclassified (egg plant, apiary, bee wax)	1	3,036		
Food or Beverage Establishment - unclassified	1	7,500		
Food, Beverage Sale - unclassified	1			
Forest, standing timber	5	9,000		
Furniture, Appliance, Hardware Sales - unclassified	1			
Furniture Excludes general warehouse	1	5,000		
Gas distribution system, pipeline	1			
General business office	7	194,000		
General hospital	1	15,466		
General maintenance shop (aircraft and railroad repair)	10	595,000		
General truck. Non-flammable cargo, tow, grain, mail, van	343	2,650,744	5	
Grain mill products manufacturing	6	18,000		
Ground Transport Vehicle-unclassified (bicycle, flatbed not attached)	18	2,747		
Groundskeeping equipment - lawnmowers, irrigation equip	5	10,751		
Hardware store	1	3,000		
Hazardous chemicals No atomic fission and fusion	1			
Heating plant	1	2,008		
High School Includes combinations	2	1,000		
Home for the aged with nursing staff	5	37,070	1	
Home for the aged without nursing staff	1	3,000		

	# Fires	Total $ Loss	# Injuries	# Deaths
Home maintenance service	1	75,000		
Hotel, Inn, Lodge - seasonal use - in season	1	500		
Hotel, Inn, Lodge - unclassified (describe)	1	555,000		
Hotel, Inn, Lodge - year round use	6	140,000		
Ice rink (code as outside for outside rink), curling rink	2	80,100		
Individual residential parking in one-storey garages	86	655,330		
Industrial Manufacturing Properties - unclassified	6	200		
Industrial truck, forklift, streetsweeper, garbage, skidder, gravel	5	164,639	1	
Institutional Miscellaneous - unclassified (WIN house)	1			
Jail, municipal or provincial	2	200		
Junior High School	6	3,500		
LP gas cylinders	1			
Laundry (self-serve)	1			
Library	1	2,500		
Livestock storage	1			
Machinery manufacturer No electrical machinery or appliances (machine shop on farm)	1			
Machinery	1			
Mailboxes	2	300		
Mall Includes only the common public area	1			
Market, grocery stores	2	328,000	1	
Medical, health, research or scientific office	1			
Mercantile Miscellaneous - unclassified (computer store)	5			
Metal, Mach, Electrical Appliance-unclassified	1	8,000		
Metal, Metal Prod, Elect Equipment & Appliances-unclassified	1			
Mining, Quarrying - unclassified (describe)	2	50,000		
Miscellaneous-unclassified (portable welder, human only)	275	67,201	2	
Mobile Home, Trailer - unclassified	3	8,000		
Mobile and fixed crane	1	35,000		
Mobile home	31	532,080		
Monument, memorial building	1	55,000		
Motor Hotel, Motel - 3 to 20 units	1			
Motor Hotel, Motel - over 20 units	1	175,000		
Motor Hotel, Motel - unclassified	1	10,700		
Motor home, camperized van	6	33,125		
Motor vehicle repair garage/paint shop No car washing	7	637,700		
Motor vehicle sales & services including farm implements	3	298,835	1	
Motorcraft (20m and under over-all length)No outboards	2	119,800		
Motorcycle	1	1,000		
Office - unclassified	10	801,400	1	
Outbuildings - unclassified (doghouse, gazebo)	29	494,970		
Outdoor Property-unclassified(bonfire, shopping cart)	62	5,900		
Paper, rolled newsprint	2			
Paper/pulp/paperboard manufacturer	3			
Pet store, animal hospital Includes kennels	1			
Petroleum refineries	2	15,000		
Petroleum/gas well with accompanying reservoir & batteries,	6	1,052,023		
Pier, wharf	1			
Plastic products manufacture	1			
Poultry, egg production	3	11,500		
Prison, penitentiary for men (cell blocks)	3			

	# Fires	Total $ Loss	# Injuries	# Deaths
Private service station	1	40,000		
Privy (outhouse)	1	2,000		
Public service station Excludes marine service	3	97,000		
Rail Transport Vehicle and Equipment - unclassified	5	2,000		
Railway station	1	25,000		
Railway yard	1			
Recreation, Hobby Supplies-unclassified(ceramic, art restoration, framing	1	15,000		
Recreational vehicle (quad, trimoto, odyssey)	2	7,800		
Repair Shop, Laundry, Dry Cleaner - unclassified	2	323,500		
Residential Miscellaneous - unclassified (detached garage converted)	10			
Restaurant	19	687,978		
Rooming, Boarding, Lodging House - 4 to 8 roomers	2			
Sanitary service No small rubbish barrels/incinerators	8	4,000		
Sawmill, planing mill, wood products mill	4	2,000		
School, college or university dormitory	1	33,000		
Scrap and junkyards	2			
Semi-trailer truck	34	1,297,338		
Shed Includes implement shed	60	940,115	1	
Silo on farm Excludes bulk storage of grain	2	9,000		
Slaughtering, preparation, preserving of meat/poultry (meat smokers)	2	12,084		
Small variety store	3	2,500		
Snowmobile	7	41,815		
Special Vehicle-unclassified(fire, welding, insulation, golf cart, etc.	8	109,584		
Storage Properties - unclassified (taxidermy warehouse)	15	140,500		
Storm and weather, bomb or fallout shelter	1			
Supermarket	2	8,000		
Telephone exchange	1	157,390		
Trade supply sales	1	150,000		
Trash and rubbish Excludes industrial facilities	1038	35,273	2	
Travel trailer, holiday trailer	9	87,575		
Trees, shrubs Includes individual trees only	17	32,100		
Unoccupied property, property left unoccupied over 30 days	2			
Utility - unclassified (portable water pump)	5			
Vacant property, without contents, or condemned	25	51,675		
Vehicle and non-motorized hauling vehicle	10	117,000	1	
Vehicles Storage - unclassified	2	25,000		
Vessel (under 1,000 gross tons) Vessel 20m+ length	1	1,500		
Warehouse	2	11,983		
Water supply system and pump house	1			
Wood products	1			
Wood, Furniture, Paper and Products - unclassified	3	32,138		
Wooden, cane containers, small cane ware manufacture	2			
Total	**5008**	**57,024,996**	**72**	**6**

Figure A: Most Frequent Property Classes Involving Fire Losses

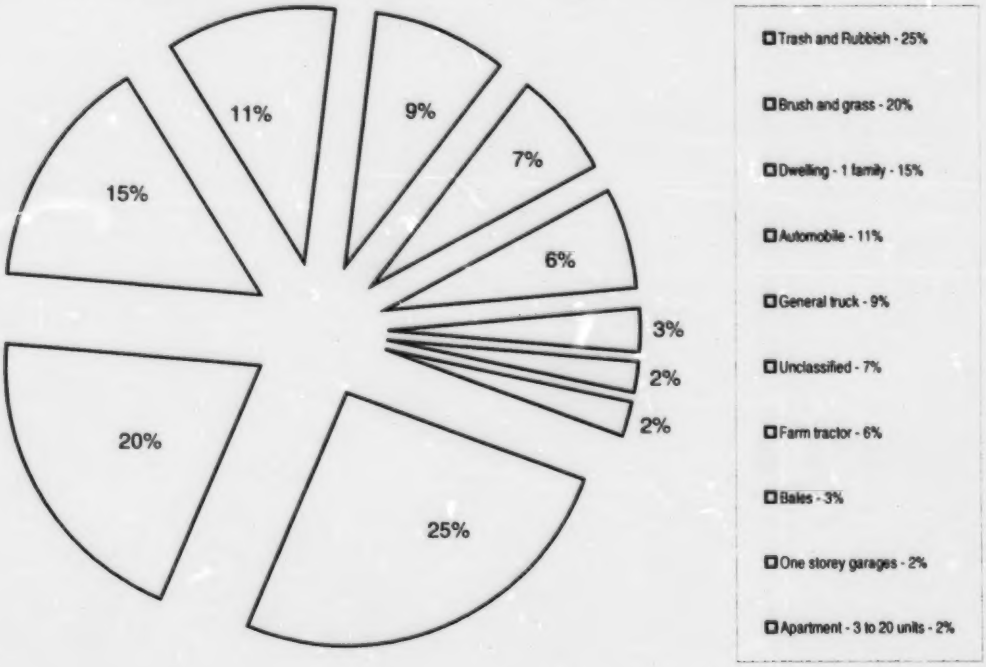


Figure B: Losses by Day of Week

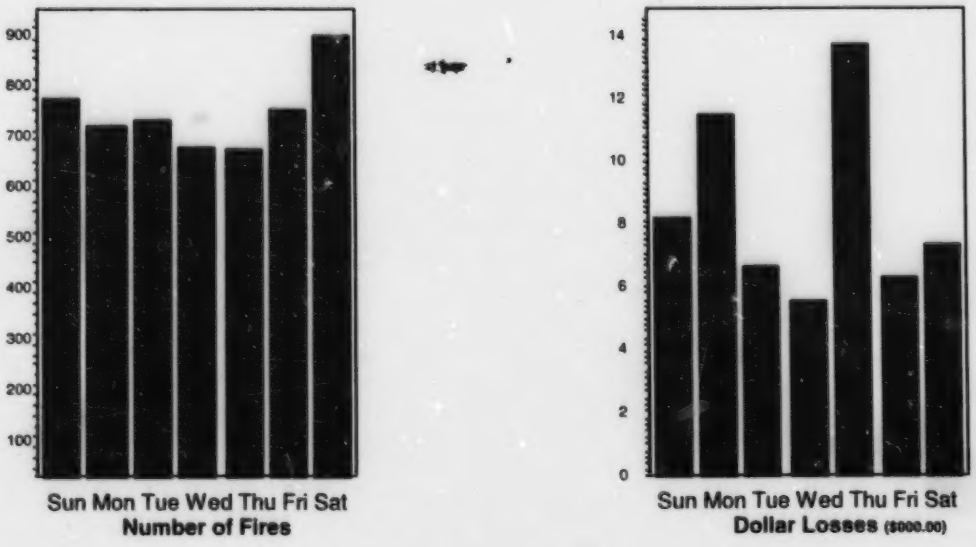
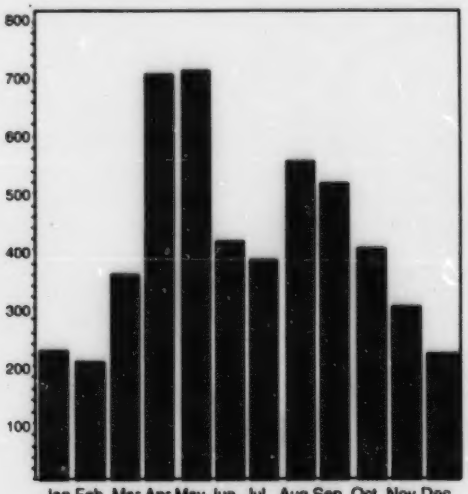


Figure C: Losses by Month



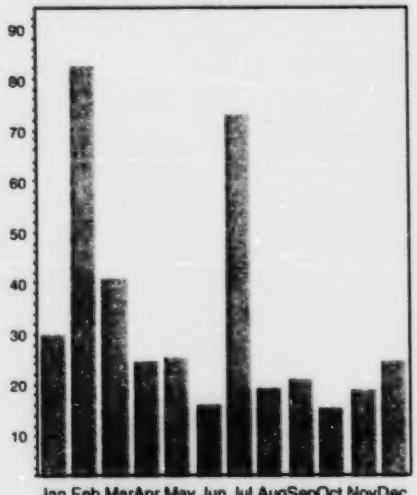


Table 2: Fatalities by Sex and Age

	Age in Years										
	0-5	6-10	11-16	17-20	21-25	26-35	36-45	46-55	56-65	over 65	Total
Female	1							2			3
Male						1				2	3
All	1					1		2		2	**6**

Table 3: Injuries by Sex and Age

	Age in Years										
	0-5	6-10	11-16	17-20	21-25	26-35	36-45	46-55	56-65	over 65	Total
Female	1	1	2	2	3	3	3	3	2	2	22
Male	7		1	5	7	11	10	4	1	4	50
All	8	1	3	7	10	14	13	7	3	6	**72**

Table 4: Casualties by Time of Day

			Fire Deaths		Injuries	
Time Periods	# of fires	%	# of fires	%	# of fires	%
10:30pm-6:29am	1244	24.8	4	66.7	25	34.7
6:30am - 2:29pm	1189	23.8	2	33.3	26	36.1
2:30pm - 10.29pm	2194	43.8	0	0	13	18.1
Time not Reported	381	7.6	0	0	8	11.1
Totals	**5008**	**100**	**6**	**100**	**72**	**100**

Table 5: Fire Fatalities by Act or Omission

Act or omission - cannot be determined.	3
Child playing with.	1
Incendiary	1
Smoker's material.	1
Total	**6**

Table 6: Fire Fatalities by Fixed Property Use

Apartment, Tenement, Flat-3 to 20 unit - No business.	2
Dwelling, year-round use (1-family).	4
Total	**6**

Figure D: Injuries and Fatalities by Month

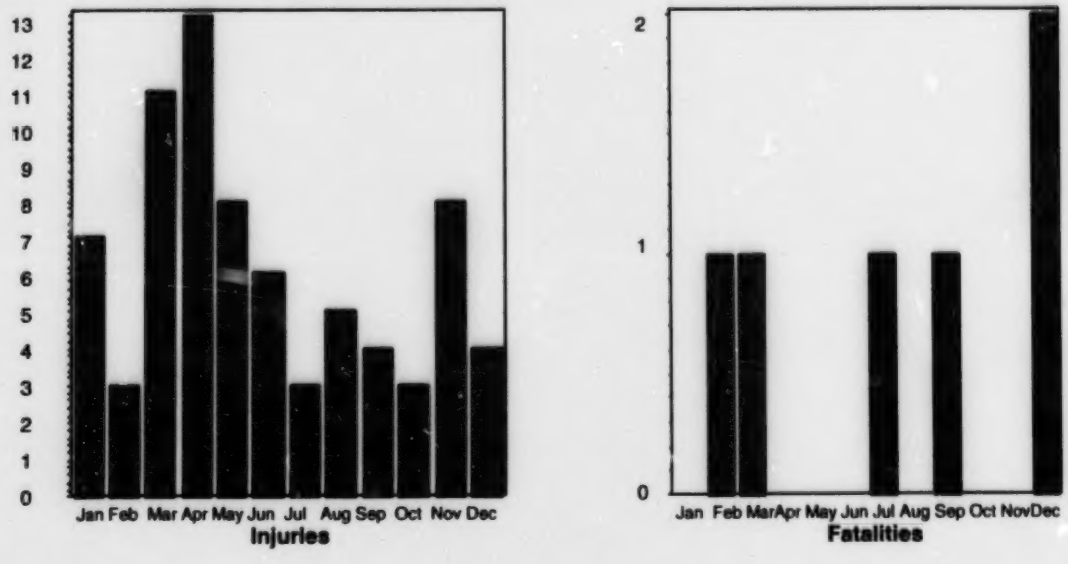


Table 7: Fire Fatalities by Ignition Scenario

Source	Material	Act	Property Class	# Deaths
Igniting Object - Cannot be determined.	Material First Ignited - Cannot be determined.	Act or omission - cannot be determined.	Apartment, Tenement, Flat-3 to 20 unit - No business.	1
Lighter	Material First Ignited - Cannot be determined.	Child playing with.	Apartment, Tenement, Flat-3 to 20 unit - No business.	1
Igniting Object - Cannot be determined.	Material First Ignited - Cannot be determined.	Act or omission - cannot be determined.	Dwelling, year-round use (1-family).	1
Match/lighter can not be determined	Flammable Liquids - Combustible Liquids - Cannot be determined.	Incendiary	Dwelling, year-round use (1-family).	1
Igniting Object - Cannot be determined.	Material First Ignited - Cannot be determined.	Act or omission - cannot be determined.	Dwelling, year-round use (1-family).	1
Smoker's material - Cigarette	Bedding. Includes blanket, sheet, comforter, eiderdown, heating pad.	Smoker's material.	Dwelling, year-round use (1-family).	1
			Total	**6**

Table 8 Fire Injuries by Act or Omission

	Minor Injury	Light Injury	Serious Injury	Total
Accident (for example candle left burning).	4	1	1	6
Act or omission - cannot be determined.	3		2	5
Asleep-no suspected use of alcohol/drugs/ medication.		3		3
Animal	1			1
Child playing with.	11	2	2	15
Electrical short circuit/overloaded extension cord/failure.		1		1
Hot exhaust/catalytic converter caught grass or vehicle on fire.	1			1
Human failing - cannot be determined.			1	1
Inadequate control of open fire.	2	1	1	4
Incendiary		1		1
Incendiary-under 18 years of age	2		3	5
Mechanical, electrical failure, malfunction-unclassified. (backfire, flooding).	.	1		1
Mechanical/electrical failure, malfunction - undetermined.	2	1		3
Misuse of material ignited - cannot be determined.			1	1
Misuse of source of ignition - Cooking on stove or (setting off fireworks).	5	3		8
Overheated cooking oil, grease, wax.	1			1

	Minor Injury	Light Injury	Serious Injury	Total
Part failure, leak, break.	2	1		3
Part worn out (seized or overheated bearing).	1			1
Smoker's material.	2	2	1	5
Suspected impairment by use of alcohol/drugs/medication.		1		1
Suspicious	2			2
Suspicious-under 18 years of age	1			1
Vehicle crash - unclassified.	1			1
Welding or cutting too close to.	1			1
Total	**42**	**18**	**12**	**72**

Table 9 Injuries by Fixed Property Use

	Minor Injury	Light Injury	Serious Injury	Total
Agricultural products bulk storage. No barns.	1			1
Apartment, Tenement, Flat-1 or 2 unit without business.		1	1	2
Apartment, Tenement, Flat-3 to 20 unit - No business.	6	1	1	8
Automobile. Includes cars and ambulance.	1			1
Brush and grass on open land, field. Excludes forests.	3	2		5
Bus, trackless trolley.	1			1
Corral.	1			1
Dwelling, farm (1-family).		1		1
Dwelling, year-round use (1-family).	23	9	3	35
General truck. Non-flammable cargo, tow, grain, jeep, mail, van.	1	2	2	5
Home for the aged with nursing staff.		1		1
Industrial truck, forklift, streetsweeper, garbage, skidder, gravel	1			1
Market, grocery stores.			1	1
Motor vehicle sales & services including farm implements	1			1
Office - unclassified.	1			1
Outdoor Property-unclassified.(bonfire, shopping cart).			3	3
Shed. Includes implement shed.		1		1
Trash and rubbish. Excludes industrial facilities.	1		1	2
Vehicle and non-motorized hauling vehicle.	1			1
Total	**42**	**18**	**12**	**72**

Table 10: Action/Condition of Fatality

Asleep at time of fire.	1
Awake and no physical/mental impair. at time of fire.	1
Bedridden or other physical handicap.	1
Condition of Casualty - Unknown.	2
Too young to react to fire emergency.	1
Total	**6**

Figure E: Trends in Fatalities and Injuries

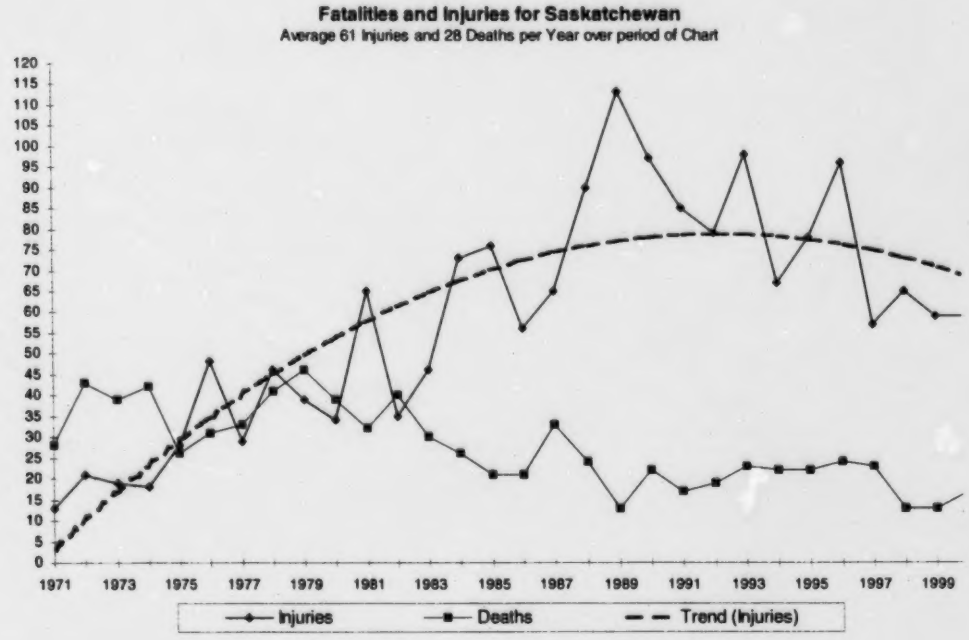


Figure F: 10 Year Average Fatalities and Injuries

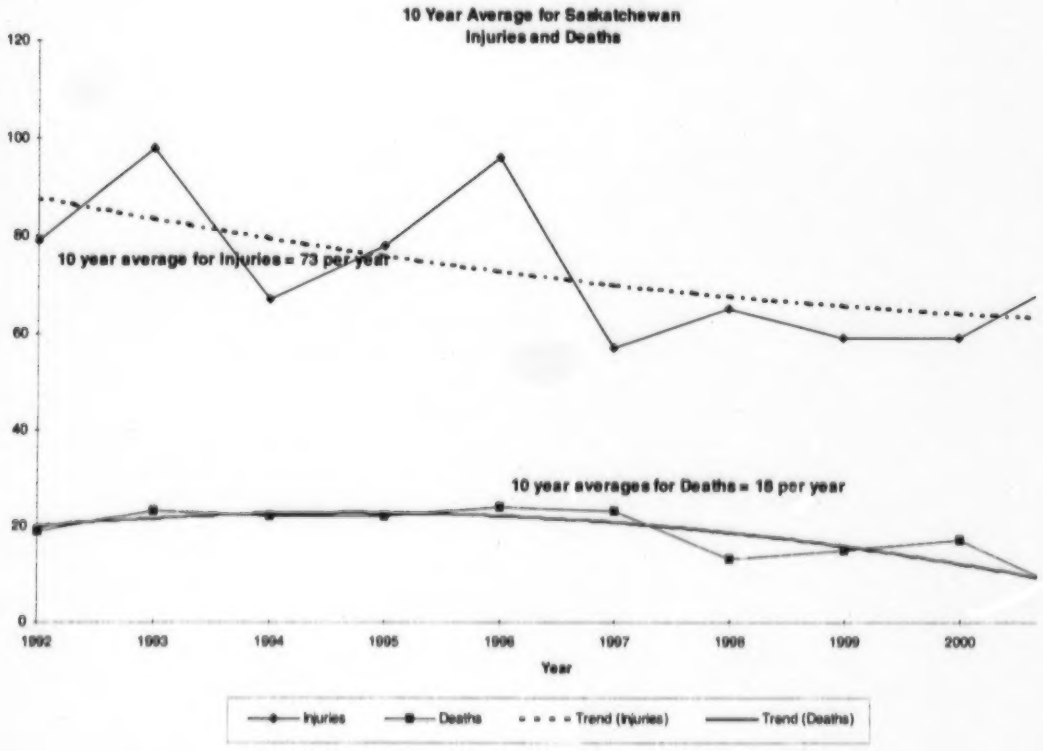


Table 11: Initial Detection

	Fires	% Of Total	Deaths	% Of Total	Injuries	% Of Total	$ LOSS	% Of Total
Automatic System - Other Than Sprinkler.	1	0	0	0	0	0	9,125	0.0
Heat Alarm Device NOT to fire alarm system.	1	0	0	0	0	0	1,000	0.0
Initial Detection - Cannot be determined.	383	7	0	0	1	1	1,256,271	2.2
Initial Detection - Unclassified.	49	1	0	0	0	0	57,966	0.1
Smoke Alarm NOT to fire alarm system.	52	1	0	0	5	7	383,002	0.7
Smoke Detector Device - fire alarm system.	28	1	0	0	0	0	395,114	0.7
Visual Sighting or other Personal Detection.	4494	90	6	100	66	92	54,922,519	96.3
Total	**5008**	**100**	**6**	**100**	**72**	**100**	**57,024,996**	**100**

Table 12: Equipment Performance

	Fires	% Of Total	Deaths	% Of Total	Injuries	% Of Total	$ LOSS	% Of Total
Equipment present fire too small to operate	101	2	0	0	0	0	40,066	0.1
Equipment operated	227	5	1	17	11	15	8,222,657	14.4
Equipment should have operated but didn't	35	1	1	17	3	4	854,338	1.5
No equipment present	1113	22	0	0	7	10	3,030,548	5.3
Not a structure - no equipment	1263	25	0	0	7	10	7,498,520	13.2
Performance cannot be determined	1971	39	4	66	42	58	26,014,092	45.5
Performance unclassified	161	3	0	0	1	1.5	1,292,466	2.3
Structure no equipment	137	3	0	0	1	1.5	10,070,310	17.7
Total	**5008**	**100**	**6**	**100**	**72**	**100**	**57,024,996**	**100**

Table 13: Fire Loss by Source of Ignition

	# Fires	Total $ Loss	# Injuries	# Deaths
Appliances and Equip-Unclassified.(fogger, fan in-car warmer, gas pump).	27	273,500		
Bar-b-q starter	1	.		
Battery, rectifier.	36	406,760		
Bearing, belting, conveyor, brake (tire spinning & overheating).	94	821,825	2	
Candle, taper.	38	417,701	6	
Central air conditioning and refrigeration equipment.	1			
Central heating unit. (furnace/boiler/stoker).	33	542,048		
Chemical reaction, spontaneous combustion.	20	676,313		
Chimney can not be determined	4	26,300		
Cooking Equipment - Unclassified (wood burning stove, meat smoking equip).	34	548,262		
Cutting torch.	18	148,211		
Deep fat fryer - separate appliance.	7	562,000		
Detached structure (exposure)	23	246,214	2	
Dryer for clothes.	21	122,147		
Electric blanket, heating pad.	4	110,560		
Electrical Distribution Equipment - Unclassified (car cigarette lighter).	122	3,644,511	1	
Explosive.	2			
Exposure - Unclassified -describe (exposure)	5	18,750		

	# Fires	Total $ Loss	# Injuries	# Deaths
Factory built chimney	6	125,000		
Fireplace	17	747,774	1	
Fireworks	4	.		
Flue pipe, vent connector.	5	200,000		
Food warming appliance, portable	7	9,019		
Forest, tree(s) (exposure)	1	.		
Fry pans, grills not on stove.	3	35,500		
Grass, shrub, brush, scrub (exposure)	6	19,000		
Heat tape	2	78,050		
Heating Equipment - Unclassified.	24	180,524		
Hot ashes, embers not associated with smoker's material, incense.	36	207,603		
Igniting Object - Cannot be determined.	2149	13,928,731	13	3
Igniting Object - Undetermined (describe) (flint stove lighter).	80	314,132		
Incandescent lamp, lightbulb. Includes lantern, spotlight, flashlight, heat lamp	8	12,000		
Individual refrigeration unit.	7	199,295		
Internal combustion engine. Includes exhaust system (boat motor).	375	10,357,264	4	
Lamp.	28	170,714	2	
Lawnmower.	4	64,000		
Lighter	9	121,000	4	1
Machinery, equipment, commercial and industrial. Excludes appliances/equipment	23	58,931		
Masonry chimney	10	56,100		
Match	19	65,526	8	
Match/lighter can not be determined	435	2,940,413	3	1
Motor 1 H.P. & over. Exclude air conditioning, refrigeration, washing machine. Machinery central heat, mowers	9	91,300		
Motor under 1 H.P. - See Manual (garage door opener).	4	1,100		
No Igniting Object (lightning).	49	1,398,153		
Open fire. Campfire, bonfire, warning flare, rubbish fire, thawing fire (exposure)	404	2,625,787	3	
Open fired broiler, portable type includes barbecue.	10	30,625		
Other Electrical Equip-Unclassified. (generator, video game, photocopier, sign).	5	.		
Other cooking unit(portable-hot plate, camp stove, toaster oven, wok, popcorn maker).	9	91,923	2	
Outside storage container, tank (exposure)	1			

	# Fires	Total $ Loss	# Injuries	# Deaths
Oven of stove, range.	20	256,100		
Panelboard, switchboard. Includes fuse, circuit breaker.	9	2,471,500		
Permanent electric wiring, cable(power line/junction box).	281	2,424,129	2	
Portable space heater. Includes room heater, salamander.	23	2,705,603	2	
Pressing iron/curling iron Includes ironing machine.	1	700		
Radio, stereo, phonograph, tape recorder.	2	13,856		
Sauna heater	1	127,600		
Service water heater.	3	120,191		
Smoker's Material/Open Flame-Unclassified(molotov cocktail, hot air balloon, etc.	24	11,958		
Smoker's material – Ashtray	1	2,500		
Smoker's material – Cigarette	123	2,106,961	6	1
Smoker's material can not be determined	4	61,000		
Stationary space heater (wall furnace, unit heater).	6	211,000		
Stove, range, top burner area - involving fire in pan.	97	857,599	7	
Stove/range/top burner area - involving fire in fryer/pot.	14	159,562	1	
Stove/range/top burner area-involving other circumstances.	49	692,694	2	
Switch, outlet. Includes receptacle, socket.	20	552,397		
Switchgear. Includes power switchgear only.	1			
Tar pot.	4			
Television, picture receiving or reproducing equipment (VCR).	4	422,000		
Temporary electric wiring, cable.	12	94,829		
Toaster, waffle iron.	3	3,000		
Torch, other than cutting, welding.	28	486,128	1	
Transformer.	10	19,416		
Washing machine.	2	3,725		
Welding equipment.	27	525,984		
Total	**5008**	**$57,024,996**	**72**	**6**

Table 14: Fire Loss by Act or Omission

	# Fires	Total $ loss	# Injuries	# Deaths
Accident (for example candle left burning).	67	804,166	6	
Act or omission - cannot be determined.	1210	10,715,300	9	3
Aircraft.	1			
Arson or other set fires - unclassified.	15	177,100		
Asleep - suspected use of alcohol, drugs or medication.	6	13,700		
Asleep-no suspected use of alcohol/drugs/ medication.	15	169,700	3	
Automatic control failure.	1			
Automobile.	15	81,040		
Animal	13	183,042	1	
Child playing with.	80	767,801	15	1
Cleaning, washing parts.	2			
Combustible placed too close to heat (something solid-box too close).	18	620,790		
Construction deficiency.	6	166,670		
Construction/design/installation deficiency-undetermined.	13	683,000		
Construction/design/installation deficiency-unclassified.	6	67,280		
Design deficiency.	5	13,766		
Distracted, preoccupied.	42	279,154		
Electrical short circuit/overloaded extension cord/failure.	205	2,517,247	1	
Exposure from other fire.	23	96,871		
Fireplace - flying embers.	2	11,000		
Fireplace - paper fell out.	1			
Flammable liquid to kindle fire.	2			
Fuel spilled accidentally.	3	48,326		
Hot exhaust/catalytic converter caught grass or vehicle on fire.	43	391,164	1	
Human failing - cannot be determined.	20	249,492	1	
Human failing - unclassified.	18	64,000		
Ignorance of hazard (not clean, lack of maintenance/improper disposal cigarette).	86	1,161,708		
Improper container.	4	.		
Improper fuelling technique.	3	129,904		
Improper storage (gas too close to...).	7	410,189		
Inadequate control of open fire.	385	2,871,421	4	
Incendiary	209	2,569,067	1	1
Incendiary-under 18 years of ages	45	514,040		

	# Fires	Total $ loss	# Injuries	# Deaths
Industrial truck.	3	55,000		
Installed too close to combustible.	9	163,000		
Manual control failure.	2			
Mechanical, electrical failure, malfunction-unclassified. (backfire, flooding).	137	4,087,906	1	
Mechanical/electrical failure, malfunction – undetermined.	551	14,634,864	3	
Miscellaneous-undetermined. (lightning, truck too high for bridge).	130	1,627,879		
Misuse of equipment - unclassified (grinding).	4	38,000		
Misuse of material ignited - cannot be determined.	7	21,900	1	
Misuse of material ignited - unclassified.	8	3,000		
Misuse of source of ignition - cannot be determined.	10	167,750		
Misuse of source of ignition - cooking on stove or (setting off fireworks).	61	1,545,093	8	
Other installation deficiency.	7	313,500		
Other road vehicle.	1			
Overfuelling.	2	15,000		
Overheated cooking oil, grease, wax.	48	609,996	1	
Part failure, leak, break.	166	1,891,372	3	
Part worn out (seized or overheated bearing).	53	464,151	1	
Physical or mental disability (suicide).	2			
Rail vehicle.	16	8,000		
Riot-civil disturbance	6	72,250		
Smoker's material.	118	2,163,584	5	1
Suspected faulty connections involving copper wiring.	1	17,593		
Suspected impairment by use of alcohol/drugs/medication.	13	44,000	1	
Suspicious	364	1,932,216	3	
Suspicious-under 18 years of age	625	219,118	1	
Temporary loss of judgement suspected (includes panic).	5	12,000		
Thawing.	2	96,236		
Torch too close to.	28	361,231		
Vehicle crash - cannot be determined.	10	11,870		
Vehicle crash - unclassified.	6	167,000	1	
Welding or cutting too close to.	42	504,553	1	
Total	**5008**	**$57,024,996**	**72**	**6**

Table 15: Annual Losses Adjusted by Consumer Price Index (CPI)

Year	Reported $ Value	Factor	2001 $ Value
1980	$48,932,799.00	2.20	$107,509,288.31
1981	$31,138,114.00	1.96	$61,158,710.04
1982	$29,361,627.00	1.80	$52,921,255.85
1983	$31,920,418.00	1.69	$54,053,703.62
1984	$35,469,311.00	1.63	$57,787,619.00
1985	$25,747,955.00	1.57	$40,470,676.01
1986	$31,723,967.00	1.53	$48,471,645.01
1987	$33,703,293.00	1.46	$49,067,430.20
1988	$47,038,700.00	1.40	$65,625,254.69
1989	$46,066,565.00	1.34	$61,558,428.70
1990	$43,671,241.00	1.28	$55,876,911.97
1991	$38,707,867.00	1.22	$47,075,022.09
1992	$43,822,419.00	1.20	$52,762,192.48
1993	$37,032,957.00	1.17	$43,289,009.93
1994	$27,406,499.00	1.16	$31,728,293.07
1995	$25,492,885.00	1.13	$28,712,285.82
1996	$33,185,430.00	1.11	$36,689,860.17
1997	$47,468,264.00	1.09	$51,814,859.34
1998	$39,720,293.00	1.08	$42,775,700.15
1999	$46,214,767.00	1.06	$48,938,064.62
2000	$52,073,259.00	1.03	$53,724,253.50
2001	$57,020,496.00		$57,024,996.00

Figure G: Annual Losses Adjusted by Consumer Price Index (CPI)

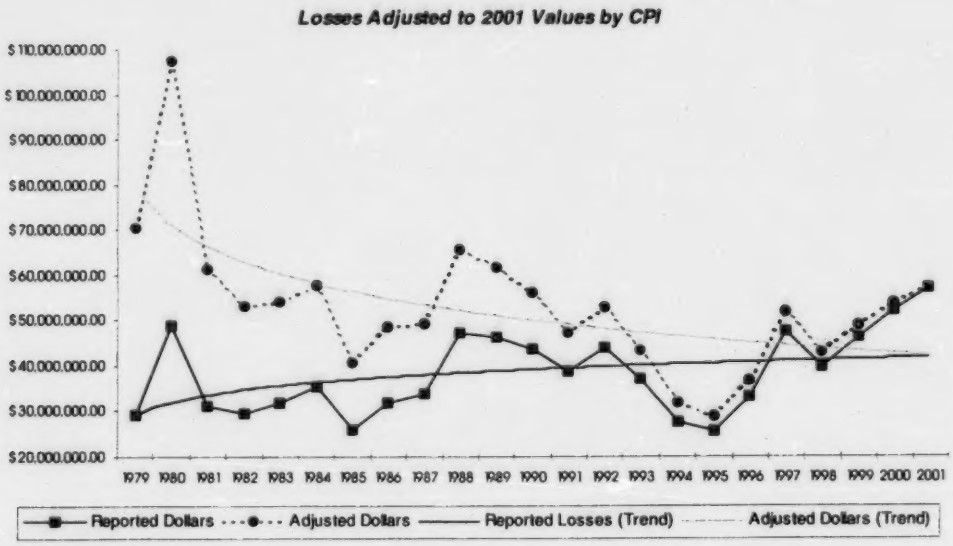


Figure H: 30 Fire Record – Number of Fires

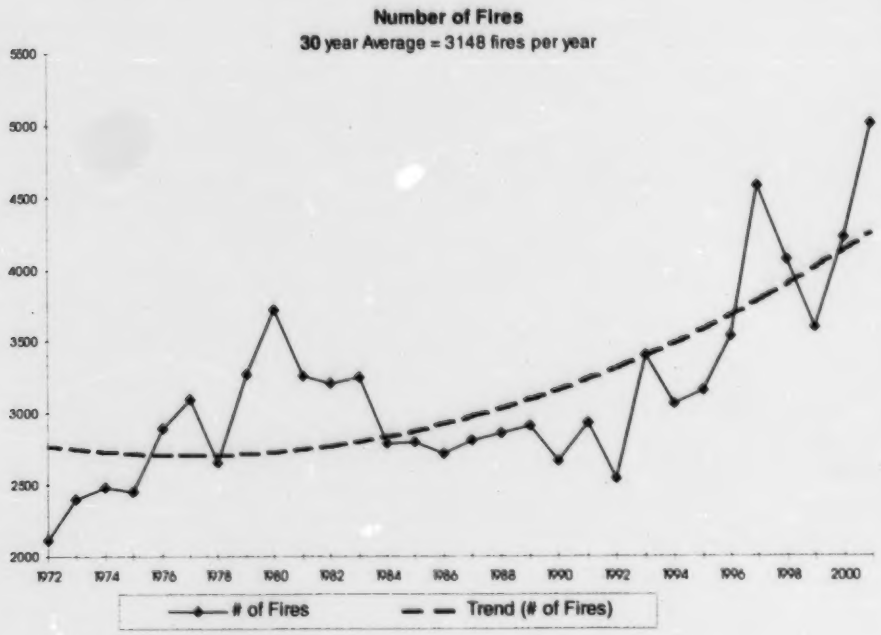


Figure I: 30 Fire Record – Property Loss

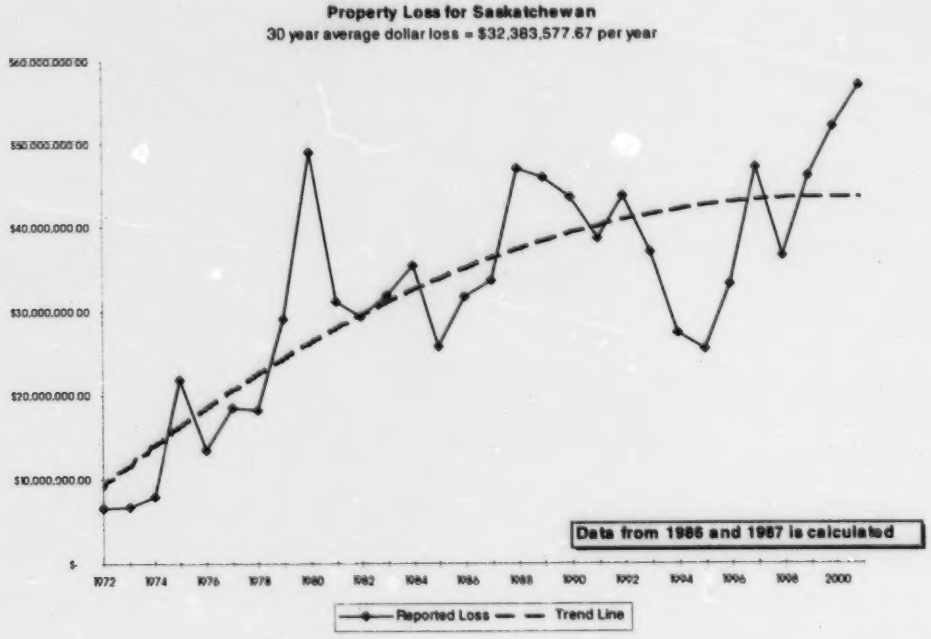


Table 16: Large Loss Fires over $500,000.00

Property	Act/Omission	$ Loss
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Mechanical/electrical failure, malfunction - undetermined.	6,550,000
Agricultural products bulk storage. No barns.	Act or omission - cannot be determined.	5,880,000
Motor vehicle sales & services including farm implements	Mechanical/electrical failure, malfunction - undetermined.	5,240,248
Education facility - unclassified (describe).	Miscellaneous-undetermined.	4,999,168
Ice rink (code as outside for outside rink), curling rink.	Mechanical, electrical failure, malfunction-unclassified. (backfire, flooding).	3,034,355
Basic nonferrous metals manufacture.	Mechanical, electrical failure, malfunction-unclassified. (backfire, flooding).	2,400,000
Apartment, tenement, flat - unclassified (describe).	Incendiary	2,066,947
Shed. Includes implement shed.	Miscellaneous-undetermined. (lightning, truck too high for bridge).	2,000,000
Lumberyards, building materials. Excludes storage.	Inadequate control of open fire.	2,000,000
Cow/cattle/pig production. Excludes milk processing.	Suspicious	1,773,139
Sawmill, planing mill, wood products mill.	Welding or cutting too close to.	1,722,000
Hardware store.	Miscellaneous-undetermined.	1,600,000
Vehicles and related equipment - unclassified.	Mechanical/electrical failure, malfunction - undetermined.	1,500,000
Elevators, grain, commercial.	Mechanical/electrical failure, malfunction - undetermined.	1,250,000
Cow/cattle/pig production. Excludes milk processing.	Smoker's material.	1,250,000
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Miscellaneous-undetermined. (lightning, truck too high for bridge).	1,000,000
Mineral materials, cement, lime, gypsum or other.	Part worn out (seized or overheated bearing).	1,000,000
Petroleum/gas well with accompanying reservoir & batteries, etc.	Mechanical/electrical failure, malfunction - undetermined.	1,000,000
Bridge, overpass, trestle.	Inadequate control of open fire.	1,000,000
Petroleum/gas well with accompanying reservoir & batteries, etc.	Miscellaneous-undetermined. (lightning, truck too high for bridge).	1,000,000
Arena, stadium, amusement/entertainment tent.	Mechanical/electrical failure, malfunction - undetermined.	1,000,000
Bridge, overpass, trestle.	Act or omission - cannot be determined.	930,000
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Combustible placed too close to heat source	912,200

Property	Act/Omission	$ Loss
Motor vehicle repair garage/paint shop. No car washing.	Act or omission - cannot be determined.	872,750
Basic metal products manufacture. See manual-exceptions	Welding or cutting too close to.	800,000
Restaurant.	Mechanical/electrical failure, malfunction - undetermined.	800,000
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Misuse of source of ignition	800,000
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Part failure, leak, break.	775,000
Construction equipment -excludes crane, grader.	Misuse of source of ignition - cannot be determined.	715,000
Lumberyards, building materials. Excludes storage.	Misuse of equipment - unclassified (grinding).	702,995
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Human failing - cannot be determined.	700,000
Animal barn, cattle, pigs, horses, dog kennels/other livestock.	Act or omission - cannot be determined.	657,625
Hotel, inn, lodge - year round use.	Miscellaneous-undetermined. (lightning, truck too high for bridge).	600,000
Semi-trailer truck.	Part failure, leak, break.	600,000
Cow/cattle/pig production. Excludes milk processing.	Act or omission - cannot be determined.	599,936
Dwelling, year-round use (1-family).	Incendiary	560,000
Hotel, inn, lodge - unclassified (describe).	Act or omission - cannot be determined.	555,000
Motor vehicle repair garage/paint shop. No car washing.	Mechanical/electrical failure, malfunction - undetermined.	550,000
Mercantile miscellaneous - unclassified (computer store).	Incendiary	500,000
Sawmill, planing mill, wood products mill.	Mechanical/electrical failure, malfunction - undetermined.	500,000
Motor vehicle sales & services including farm implements	Human failing - cannot be determined.	500,000
Basic industrial chemicals. No monomers & plastics.	Act or omission - cannot be determined.	500,000
Industrial truck, forklift, streetsweeper, garbage, skidder, gravel	Mechanical/electrical failure, malfunction - undetermined.	500,000

Table 17: Property at Risk Versus Claim Paid

Adjuster/Insurance Co.	Fires	Deaths	Injuries	$ Losses	$ Est. Damage
Unknown	***3236***	***3***	***24***	***1,070,489,450***	***13,174,496***
All Claims General Insurance Adjusters	2			30,800	40,500
Brouwer Claims Canada	4			2,345,000	1,208,000
Campbell & Haliburton	1				
Canadian General Ins.	1			1,200,000	60,000
Cherry Insurance	2			9,000	9,000
Clay Paget Insurance	2		2	7,353,400	137,600
Co-Operators	216		5	16,422,771	5,333,484
Federated Insurance Co.	1			460,000	460,000
Folgizan Insurance	1			15,000	15,000
Gateway Adjusters	2			605,000	17,400
Germania Mutual Ins Co.	1			100,000	30,000
Grain Insurance	2			490,000	14,800
HB Group Insurance	1			10,000	10,000
Heritage Insurance	2			1,800,000	252,000
Humboldt Assoc.	1				
Insurance Associated	2			52,000	5,500
Lindsey Morgen Claims	1			9,000,000	2,400,000
Lloyds Of London	1		1	72,540	67,700
Lombard General Ins.	4			951,500	348,450
Marsh & Mclennan	1			28,000	28,000
Mccauley Agencies	1			3,000	3,000
Mennonite Mutual Ins.	55		1	7,737,897	1,812,586
North Central Insurance	1		1	80,000	20,000
Plains Adjusters	1				7,500
Portage La Prairie	13			2,194,850	555,223
Royal Insurance Co.	4			571,490	182,364
Sask Mutual Inc.	41	1	7	5,490,690	1,247,623
SGI	1161	1	27	104,223,165	24,666,952
SSTA	1			100,000	28,000
Stinson Adjusters	1			5,000	5,000
UAB-Eisler	10		1	5,080,500	323,500
Wawanesa	233	1	3	13,986,133	4,557,788
Western Union Insurance Co.	1			1,350,000	3,531
WW Smith Insurance	1				
Total	**5008**	**6**	**72**	**1,252,257,186**	**57,024,996**